Beyond automation

The future of technology, work, and workers

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Reassessing the robots apocalypse

Three concepts that are changing the automation debate

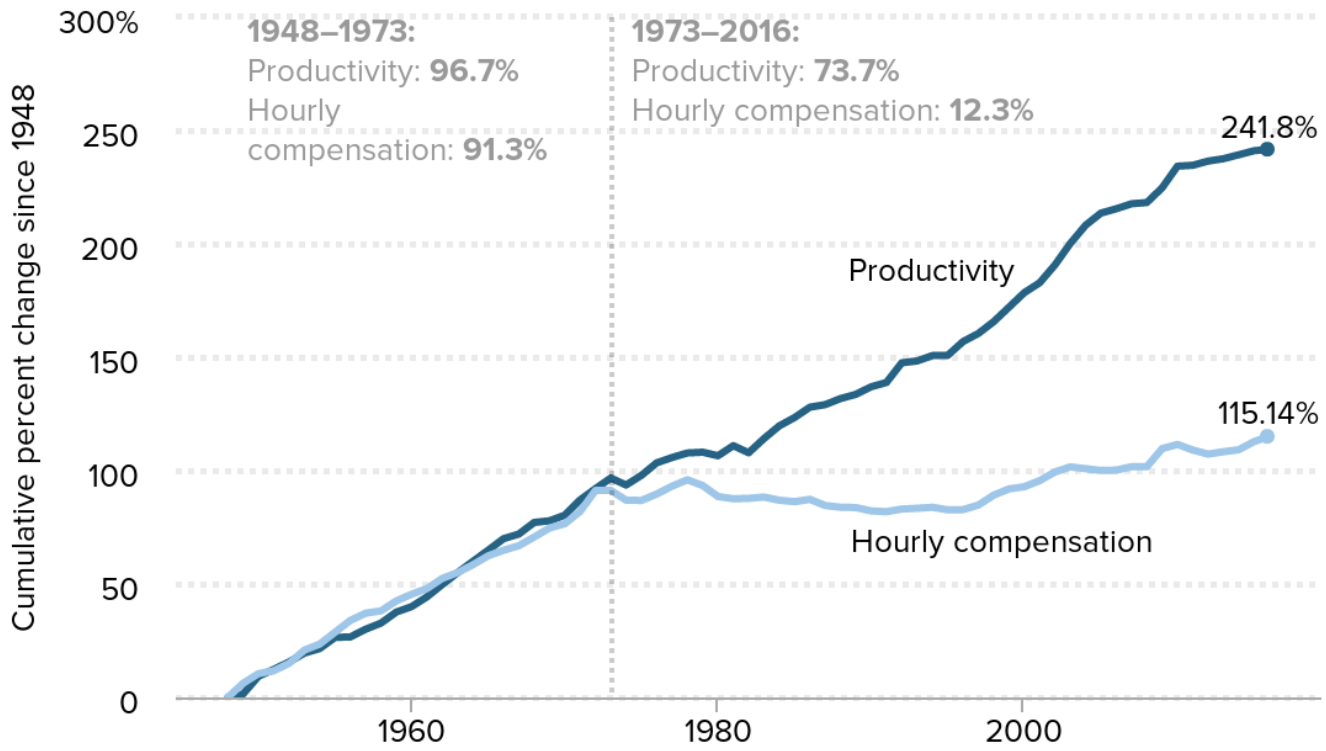
1. The distinction between tasks and jobs
2. Technical feasibility is not the same as adoption
3. Technology can create jobs, as well as automate them

Some big questions beyond automation

1. How do we ensure our economy grows good jobs, where workers work alongside and with technology?
2. How can we harness technology to reduce economic inequality and race and gender bias?
3. What role should public policy, workers, and communities play in shaping our future?
4. And what is the responsibility of employers in answering these questions – in particular, what is the role of the tech sector?

The gap between productivity and a typical worker's compensation has increased dramatically since 1973

Productivity growth and hourly compensation growth, 1948–2016



Economic Policy Institute

Job quality and equity

What can technology do?

- Can change the amount of work (job creation and destruction)
- Can change the content of work (upskilling, deskilling)
- Can change the distribution of work (by race, gender, immigration status, age)
- Can affect the quality of work (wages, health and safety)
- Can be used to reorganize work (subcontracting, gig work)
- Can change how work is controlled (electronic monitoring, scheduling)

Some examples

The shift from long-distance to short-distance trucking

Job quality at meal-kit warehouses

Algorithmic management in e-commerce warehouses

Technology and equity

1. Employment in occupations at risk of automation or deskilling/upskilling
2. Bias in algorithms used in hiring, scheduling, monitoring, and performance evaluation
3. Employment in customer-facing occupations where consumers electronically rate workers

The policy challenge

Labor standards	Strengthen labor standards on existing and new jobs, including the right to organize
Data and algorithm rights	Establish worker rights around the use of data, surveillance, and algorithmic control
Equity	Prioritize equity by race, gender, immigration status, and age
Education and training	Keep workers in their jobs and invest in their ongoing skill development
Safety net	Guarantee economic security and stability
Governance	Integrate workers in decision making about workplace technology
Gain sharing	Broadly distribute productivity gains from technology

A starter list of policy goals

1. Workers should know about the data being gathered on them, and the purpose and impact of algorithms being used

2. Workers should have the ability to negotiate over, and redress harms from, the use of data and algorithms in their workplaces

3. Government oversight is necessary to ensure that employers are accountable in their use of these new technologies

A first stab at data and algorithm rights for workers

Thank you